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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,541	01/27/2004	Tomohisa Yamamoto	01-545	9624
23400	7590	02/27/2006	EXAMINER	
POSZ LAW GROUP, PLC 12040 SOUTH LAKES DRIVE SUITE 101 RESTON, VA 20191			DANG, ROBERT TRONG	
			ART UNIT	PAPER NUMBER
			2838	

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/764,541

Applicant(s)

YAMAMOTO, TOMOHISA

Examiner

Robert T. Dang

Art Unit

2838

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>01/27/2004 + 7/6/2007</u> | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claim 2 is objected to because of the following informalities: In line 5 of claim 2, "the temperature detection component detection components" should be rewritten as "the temperature detection components". Appropriate correction is required.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-8 is rejected under 35 U.S.C. 102(b) as being anticipated by Nishiura et al (5355123).

As to claims 1 and 8, Nishiura discloses in figure 8, an overtemperature detection device for detecting an overtemperature condition of each of adjacently arranged power components (2), each of which has a plurality of sides, comprising: temperature detection components (3 and 1); and an overtemperature detection circuit, wherein at least two temperature detection components are disposed adjacent to each power component, a first temperature detection component (61) of the two temperature detection components is placed adjacent to any one of the sides of the power component, a second temperature detection component (62) of the two temperature detection components is placed adjacent to another side of the power component, and

the overtemperature detection circuit detects the overtemperature condition of the power components based on temperature detection signals outputted from at least two of the temperature detection components (see col. 7, lines 11-15 & col. 7, lines 40-55). Since the adjacent power components are recited in the preamble, they are not required to satisfy the claim. On the other hand if they are required any of the components 2, 3, 5 is a power component as broadly defined by applicant at page 8 of the specification. The temperature of each component will be the same as the power device at col. 8 and thus each temperature is detected. Also, all components are adjacent to all sides of the components since all are on a common substrate.

As to claim 2, Nishiura discloses in figure 8, wherein one temperature detection component is disposed between two adjacent power components (V_{DD} and 2); and the temperature detection components (3 & 1) is used for detecting the overtemperature condition of the two adjacent power components.

As to claim 3, Nishiura discloses in figure 8, wherein the temperature detection component (1 & 3) is disposed at a midpoint between the two adjacent power components.

As to claim 4, Nishiura discloses in figure 8, wherein the temperature detection components (1 and 3) are used exclusively for the overtemperature detection of the power component (semiconductor substrate) (2), adjacent to which the temperature detection components are disposed (see col. 2, lines 55-60).

As to claim 5, Nishiura discloses in figure 8, wherein the overtemperature detection circuit determines the overtemperature condition of the power component (2)

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when temperature detection signals outputted from the temperature detection components (1 & 3) disposed adjacent to the power component exceed a threshold (see claim 4).

As to claim 6, Nishiura discloses in figure 8, wherein the threshold is set at different values in a case that the overtemperature condition has been detected and in a case that the overtemperature condition has not been detected (see col. 3, lines 3-33).

As to claim 7, Nishiura discloses in figure 8, further comprising an overtemperature protection circuit for controlling power supply to the power component while the overtemperature condition continues to be detected by the overtemperature detection circuit (see col. 1, lines 30-46)

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Robert T. Dang whose telephone number is 571-272-8326. The examiner can normally be reached on M-F, 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Karl D. Easthom can be reached on 571-272-1989. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


KARL EASTHOM
SUPERVISORY PATENT EXAMINER

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RTD



KARL EASTHOM
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